

1 1. In a system having a plurality of receivers and at least one aggregation module,
2
3 a method for providing real-time streaming media from a wide area network to the plurality of
4 set top boxes, the method comprising:

5 (a) receiving at at least one aggregation module a request for real-time
6 streaming media accessible via a wide area network from each of a plurality of
7 receivers, each request comprising an identifier representative of the receiver making
8 the request;

9 (b) using the at least one aggregation module, creating a single
10 communication connection between at least one proxy module and the wide area
11 network from which a single copy of the real-time streaming media is retrievable;

12 (c) buffering the single copy of the real-time streaming media at the at least
13 one aggregation module; and

14 (d) using the buffered single copy of the real-time streaming media,
15 delivering separate instances of the streaming media to the plurality of receivers.

16 2. A method as recited in claim 1, wherein the at least one proxy module is remote
17 from at least one of the plurality of receivers.

18 3. A method as recited in claim 1, further comprising delivering the cached single
19 copy of the streaming media to the at least one aggregation module.
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21 4. A method as recited in claim 3, further comprising delivering separate instances
22 of the streaming media to the plurality of receivers by the at least one aggregation module.
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1 5. A method as recited in claim 1, further comprising selecting a format for
2 delivering the streaming media to the plurality of receivers.

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4 6. A method as recited in claim 1, further comprising delivering the streaming
5 media to each of the plurality of receivers by a multicast broadcast.

6
7 7. A method as recited in claim 1, further comprising converting the single copy of
8 the streaming media into a standardized format.

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10 8. A method as recited in claim 1, wherein the system comprises a cable system
11 having a plurality of used channels for display broadcast programming to the plurality of
12 receivers and a plurality of unused channels.

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14 9. A method as recited in claim 8, further comprising identifying when to delivery
15 the single copy of the real-time streaming media to the plurality of receivers by at least one of
16 the plurality of unused channels.

1 10. A computer program product for implementing, in a system having a plurality of
2 receivers, a method for providing streaming media from a wide area network to the plurality of
3 receivers, the computer program product comprising:

4 a computer readable medium carrying computer-executable instructions
5 for implementing the method, wherein the computer-executable instructions
6 comprise the act of:

7 receiving at the aggregation module a request for streaming
8 media accessible via a wide area network from each of a plurality of
9 receivers, each request comprising an identifier representative of the
10 receiver making the request;

11 using the aggregation module, creating a single communication
12 connection between the proxy module and the wide area network from
13 which a single copy of the streaming media is retrievable;

14 buffering the single copy of the streaming media at the
15 aggregation module; and

16 using the buffered single copy of the streaming media, delivering
17 separate instances of the streaming media to the plurality of receivers.

1 11. In a system having a plurality of receivers and at least one aggregation module,
2 a method for providing streaming media from a network to the plurality of receivers, the
3 method comprising:

4 (a) receiving at an aggregation module a request for streaming media
5 accessible via a network from each of a plurality of receivers;

6 (b) using a proxy module in communication with the aggregation module,
7 retrieving a copy of the streaming media from the network;

8 (c) delivering the single stream to the aggregation module

9 (d) buffering the copy of the streaming media at the aggregation module;
10 and

11 (e) delivering the stream of the buffered streaming media to a termination
12 system for transmission to each of the plurality of receivers, wherein each of the
13 plurality of receivers receives substantially the same packets of the buffered streaming
14 media.

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16 12. A method as recited in claim 11, wherein the network is selected from the group
17 consisting of a wide area network and a local area network.

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19 13. A method as recited in claim 12, wherein the network is the Internet.

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21 14. A method as recited in claim 13, further comprising delivering the buffered
22 single copy of the streaming media from the aggregation module to the termination system.

1 15. A method as recited in claim 11, further comprising selecting a format for
2 delivering the streaming media to each of the plurality of receivers.

3
4 16. A method as recited in claim 15, wherein further comprising delivering a
5 plurality of instances of the streaming media to the plurality of receivers.

6
7 17. A method as recited in claim 15, further comprising delivering a single instance
8 of the streaming media to each of the plurality of receivers.

9
10 18. A method as recited in claim 15, wherein each of the plurality of receivers
11 includes at least one channel for receiving programming and at least one unused channel in the
12 associated system.

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14 19. A method as recited in claim 18, wherein the system is a cable system, a
15 television system, or a satellite system.

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17 20. A method as recited in claim 11, further comprising converting the copy of the
18 streaming media into a standardized format.

19
20 21. A method as recited in claim 11, wherein the request comprises at least one
21 addressing mechanism for network resources and at least one identifier representative of a
22 requesting receiver of the plurality of receivers delivering the request to the aggregation
23 module.

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1 22. A method as recited in claim 21, further comprising comparing a rating
2 associated with the at least one addressing mechanism for network resources against a stored
3 list of ratings to determine whether content associated with the at least one addressing
4 mechanism for network resources is to be delivered to the requesting receiver.

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6 23. A method as recited in claim 22, wherein the at least one addressing mechanism
7 for network resources comprises a uniform resource locator.

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9 24. A method as recited in claim 22, wherein comparing occurs upon the proxy
10 module delivering content retrieved from the network to the aggregation module.

1 25. A computer program product for implementing, in a system having a plurality of
2 receivers and at least one aggregation module, a method for providing streaming media from a
3 wide area network to the plurality of receivers, the computer program product comprising:

4 a computer readable medium carrying computer-executable instructions for
5 implementing the method, wherein the computer-executable instructions comprise:

6 at an aggregation module, program code means for receiving a
7 request for streaming media accessible via a proxy module from each of
8 a plurality of receivers;

9 using the proxy module, program code means for retrieving a
10 single copy of the streaming media from a network accessible to the
11 proxy module;

12 program code means for buffering the single copy of the
13 streaming media at the aggregation module; and

14 program code means for delivering the single stream of the
15 buffered streaming media to a termination system for transmission to
16 each of the plurality of receivers, wherein each of the plurality of
17 receivers receives substantially the same packet of the single stream of
18 the buffered streaming media.

19
20 26. A computer program product as recited in claim 25, wherein the computer-
21 executed instructions further comprise program code means for generating each request from
22 each of the plurality of receivers using an input device.

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1 27. A computer program product as recited in claim 25, wherein the computer-
2 executed instructions further comprise program code means for delivering the buffered single
3 copy of the streaming media from the aggregation module.

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5 28. A computer program product as recited in claim 27, wherein the computer-
6 executed instructions further comprise program code means for delivering the cached single
7 copy of the streaming media from the aggregation module to the termination system.

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9 29. A computer program product as recited in claim 27, wherein the computer-
10 executed instructions further comprise program code means for selecting a format for
11 delivering the streaming media to each of the plurality of receivers.

12
13 30. A computer program product as recited in claim 27, wherein the computer-
14 executed instructions further comprise program code means for converting the single copy of
15 the streaming media into a standardized format.

1 31. In a system having a plurality of receivers and a proxy module, each of the
2 plurality of receivers being capable of displaying a plurality of video channels, a method for
3 providing streaming media from a wide area network to the plurality of receivers, the method
4 comprising the acts of:

5 (a) receiving a request for streaming media accessible via a wide or local
6 area network from one of the plurality of receivers;

7 (b) in response to retrieving the streaming media from the wide or local area
8 network, preparing the streaming media requested by at least one of the plurality of
9 receivers for delivery to a video channel of the plurality of video channels; and

10 (c) delivering the prepared streaming video to the receiver upon the video
11 channel of the plurality of video channels.
12

13 32. A method as recited in claim 31, wherein the request comprises at least one of
14 an identifier representative of the receiver delivering the request and a uniform resource locator
15 identifying a source of the streaming media.
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17 33. A method as recited in claim 31, further comprising the act of retrieving the
18 streaming media from the wide area network via an access system.
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20 34. A method as recited in claim 33, wherein the access system comprises a proxy
21 module, a parental control module, and an aggregation module.
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1 35. A method as recited in claim 34, wherein the act of preparing the streaming
2 media comprises:

- 3 (a) an act of retrieving the streaming media, by the proxy module, managed
4 by the aggregation module, from the wide area network;
- 5 (b) an act of delivering the streaming media to a conversion module; and
- 6 (c) an act of translating the streaming media into a format capable of being
7 delivered to the receiver upon the video channel.

8

9 36. A method as recited in claim 35, further comprising an act of selecting a format
10 to deliver the streaming media to the receiver, the formats being selected from the group
11 consisting of analog format, digital format and text format.

12

13 37. A method as recited in claim 35, further comprising an act of controlling
14 delivery of the streaming media based upon information stored within at least one of the
15 parental control module, the receiver, the proxy module, the aggregation module, and a data
16 termination module.

1 38. A system for displaying media retrieved from a network to a plurality of
2 receivers, the system comprising:

- 3 (a) a source module storing media;
- 4 (b) a plurality of receivers communicating with the source module via a
5 network, each of the plurality of receivers being configured to generate a request and
6 receive the media from the source module at a first connection rate; and
- 7 (c) an access module communicating with the plurality of receivers and the
8 source module, the access module being configured to receive the request for media and
9 deliver the requested media in a format selected by the access module based upon
10 changes to the first connection rate as media is delivered to two or more of the plurality
11 of receivers.

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13 39. A system as recited in claim 38, wherein the source module comprises a server.

14

15 40. A system as recited in claim 38, wherein the access module comprises at least
16 one of each of a proxy module, a parental control module, and an aggregation module.

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18 41. A system as recited in claim 40, wherein the proxy module is configured to
19 retrieve media requested by at least one of the plurality of receivers.

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21 42. A system as recited in claim 41, wherein the aggregation module is configured
22 to convert the retrieved media into a standardized format.

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1 43. A system as recited in claim 38, wherein the aggregation module is configured
2 to deliver the requested media in a format based upon changes to the first connection rate.

3
4 44. A system as recited in claim 43, wherein the aggregation module delivers
5 multiple instances of the requested media to the plurality of receivers, each of the plurality of
6 receivers receiving a separate instance of the media.

7
8 45. A system as recited in claim 44, wherein the aggregation module delivers a
9 single instance of the requested media to the plurality of receivers, each of the plurality of
10 receivers receiving the single instance of the media.

11
12 46. A system as recited in claim 45, wherein each of the plurality of receivers is
13 capable of displaying a plurality of video channels, at least one of the plurality of video
14 channels being unused.

15
16 47. A system as recited in claim 46, wherein the aggregation module delivers a
17 single instance of the requested media to the plurality of receivers on the unused video channel.